

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021790**Date Inspected:** 14-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Segment 12BW to Segment 12CW (Full Height Longitudinal Diaphragm to Longitudinal Diaphragm)

This QA Inspector performed Dimension Control Inspection on the Full Height Longitudinal Diaphragm to Longitudinal Diaphragm at Work Point W3 (Counter Weight side) and at Work Point W4 (Cross Beam side) for the Segment 12BW to Segment 12CW between Panel Point (PP) 114.5 to PP 115 at the following locations on the request of ZPMC QC and ABF QA Inspector:

The offset was measured at 8 (Eight) different Elevations at vertical web plates.

At Elevation 20mm from the Bottom Panel.

At Elevation 1700mm from the Bottom Panel.

At Elevation 2000mm from the Bottom Panel.

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At Elevation 3400mm from the Bottom Panel.

At Elevation 3600mm from the Bottom Panel.

At Elevation 4600mm from the Bottom Panel.

At Elevation 4800mm from the Bottom Panel.

At Elevation 5400mm from the Bottom Panel.

The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The Sweep was measured at 100 mm and 600mm from Floor Beam at Panel Points (PP) 114.5 and from PP 115 at Center (Total 5 Locations) using string line.

The measurements was recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Note: Inspection report was not generated as after the inspection Caltrans QA observed weld connecting the Longitudinal Diaphragm to Bottom Panel was excavated informed ZPMC QC Mr. Song Wei and ABF QA Mr. Zhang Jin Hua.

Segment 12AW (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check along with ABF QA Inspector for the Segment 12AW at Panel Point (PP) 111 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Cross Beam (CB) side and Counter Weight (CW) side at Panel Point (PP) 111. The QA Inspector measured the Floor Beam flatness using 1500mm straight edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 12BW (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check along with ABF QA Inspector for the Segment 12BW at Panel Point (PP) 114 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Cross Beam (CB) side and Counter Weight (CW) side at Panel Point (PP) 114. The QA Inspector measured the Floor Beam flatness using 1500mm straight edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

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Segment 12CW (Floor Beam Flatness after Heat Straightening)

This QA Inspector performed Floor Beam flatness check along with ABF QA Inspector for the Segment 12AW at Panel Point (PP) 115 at the following locations after heat straightening:

The Floor Beam flatness was verified and measured at the Cross Beam (CB) side and Counter Weight (CW) side at Panel Point (PP) 115. The QA Inspector measured the Floor Beam flatness using 1500mm straight edge.

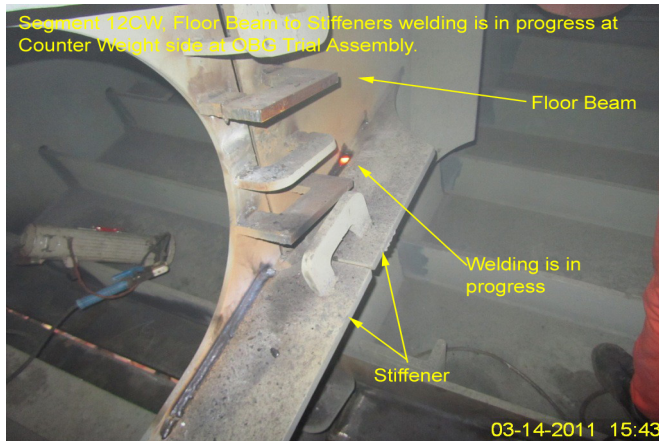
The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 12CW (Floor Beam to Stiffener weld)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Fillet weld. The weld joint was designated as CA3010D-287/288. The welder identification was 041713 and observed welding in the 3F (Vertical) and 4F (Overhead) position using approved Welding Procedure Specification WPS-B-P-2113-FCM-1 and WPS-B-P-2114-FCM-1. The piece mark was identified as weld connecting the Floor Beam to the Stiffeners, Counter Weight side.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer